

APR 20 2010

Federal Communications Commission
Washington, D. C. 20554

Approved by OMB
3060-0627
Expires 01/31/98

FOR
FCC
USE
ONLY

Federal Communications Commission
Office of the Secretary *Butler*

FCC 302-AM
APPLICATION FOR AM
BROADCAST STATION LICENSE

(Please read instructions before filling out form.)

FOR COMMISSION USE ONLY

FILE NO. *BMML-20091124AJE*

SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

EL SOL BROADCASTING, LLC

MAILING ADDRESS (Line 1) (Maximum 35 characters)

1530 NORTH CASS STREET, SUITE A

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY

MILWAUKEE

STATE OR COUNTRY (if foreign address)

WI

ZIP CODE

53202

TELEPHONE NUMBER (include area code)

414-899-9902

CALL LETTERS

WJTI

OTHER FCC IDENTIFIER (If applicable)

68759

2. A. Is a fee submitted with this application?

☐ Yes ☒ No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

☐

Governmental Entity

☐

Noncommercial educational licensee

☒

Other (Please explain):

C. If Yes, provide the following information:

**Amendment to:
BL-20091124AJE**

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A)

FEE TYPE CODE		

(B)

FEE MULTIPLE			
0	0	0	1

(C)

FEE DUE FOR FEE TYPE CODE IN COLUMN (A)
\$

FOR FCC USE ONLY

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To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)

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(B)

0	0	0	1
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(C)

\$

FOR FCC USE ONLY

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ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT REMITTED WITH THIS APPLICATION

\$

FOR FCC USE ONLY

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ORIGINAL

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT EL SOL BROADCASTING, LLC		
MAILING ADDRESS 1530 NORTH CASS STREET, SUITE A		
CITY MILWAUKEE	STATE WI	ZIP CODE 53202

2. This application is for:

- ☒ Commercial
 ☐ Noncommercial
☒ AM Directional
 ☐ AM Non-Directional

Call letters WJTI	Community of License WEST ALLIS	Construction Permit File No. BP-20060728ACH	Modification of Construction Permit File No(s). BMP-20081119AHW	Expiration Date of Last Construction Permit 11-22-09
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3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☐ Yes ☒ No

Exhibit No.
A

If No, explain in an Exhibit.

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☒ Yes ☐ No

Exhibit No.

If No, state exceptions in an Exhibit.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☒ No

Exhibit No.

If Yes, explain in an Exhibit.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☒ Yes ☐ No

☐ Does not apply

Exhibit No.

If No, explain in an Exhibit.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☒ No

Exhibit No.
N/A

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

☐ Yes ☒ No

If Yes, provide particulars as an Exhibit.

Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

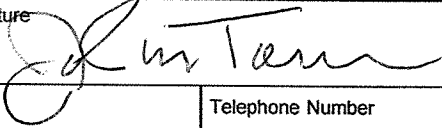
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☐ Yes ☒ No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name John M. Torres	Signature 	
Title Owner/Manager	Date 4-9-2010	Telephone Number 414-899-9902

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant

El Sol Broadcasting, LLC

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☒ Station License

☐ Direct Measurement of Power

1. Facilities authorized in construction permit					
Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
WJTI	BMP-20081119AHW	1460	U	Night 0.24	Day 1.0
2. Station location					
State			City or Town		
Wisconsin			West Allis		
3. Transmitter location					
State	County	City or Town	Street address (or other identification)		
Wisconsin	Milwaukee	West Allis	1935 S. 98th Street		
4. Main studio location					
State	County	City or Town	Street address (or other identification)		
Wisconsin	Milwaukee	Milwaukee	611 W. National Ave.		
5. Remote control point location (specify only if authorized directional antenna)					
			Suite 201		
State	County	City or Town	Street address (or other identification)		
			611 W. National Ave.		
			Suite 201		

6. Has type-approved stereo generating equipment been installed?

☐ Yes ☒ No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?

☒ Yes ☐ No

☐ Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No.

8. Operating constants:					
RF common point or antenna current (in amperes) without modulation for night system			RF common point or antenna current (in amperes) without modulation for day system		
2.28			4.65		
Measured antenna or common point resistance (in ohms) at operating frequency			Measured antenna or common point reactance (in ohms) at operating frequency		
Night			Night		
Day			Day		
50.0 50.0			-J8.8 -J13		
Antenna indications for directional operation					
Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents
	Night	Day	Night	Day	Night Day
#1	128.2	1.3	0.82	0.614	
#2	0	122.6	1.0	1.002	
#3	-114.4	---	0.624	---	
#4	100.8	---	0.422	---	
#5	---	-128.7	---	0.67	
#6	---	0	---	1.0	
Manufacturer and type of antenna monitor: Potomac AM-19 (204)					

SECTION III - Page 2

9. Description of antenna system (If directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator (6) Uniform cross section guyed steel towers	Overall height in meters of radiator above base insulator, or above base, if grounded. 48.1	Overall height in meters above ground (without obstruction lighting) 49	Overall height in meters above ground (include obstruction lighting) 49	If antenna is either top loaded or sectionalized, describe fully in an Exhibit. Exhibit No.
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Excitation



Series



Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude	43 °	00 '	32 "	West Longitude	88 °	02 '	06 "
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If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

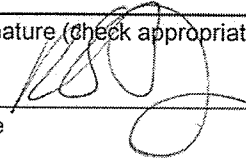
Exhibit No.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

None

11. Give reasons for the change in antenna or common point resistance.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type) R. Stuart Graham	Signature (check appropriate box below) 
Address (include ZIP Code) Graham Brock, Inc. P. O. Box 24466 St. Simons Island, GA 31522-7466	Date April 6, 2010
	Telephone No. (Include Area Code) 912-638-8028

☐ Technical Director☐ Registered Professional Engineer☐ Chief Operator☒ Technical Consultant☐ Other (specify)

AMEND BL-20091124AJE
EL SOL BROADCASTING, LLC
WJTI AM RADIO STATION
1460 kHz - 0.24/1.0 KW DA2
WEST ALLIS, WISCONSIN
April 2010

This Technical Statement was prepared on behalf of El Sol Broadcasting, LLC ("El Sol"), licensee of radio station WJTI, 1460 kHz, Racine, Wisconsin. El Sol holds an outstanding permit to change city of license to West Allis, Wisconsin and operate from an existing directional antenna site with separate daytime and nighttime directional arrays (BMP-20081119AHW). El Sol has submitted an application for station license to cover the outstanding permit (BL-20091124AJE), including a moment method proof of performance.

It has come to our attention that some of the descriptions used to identify the measurements in the proof are unclear. This amendment to the pending application attempts to clarify the identification of the measurements in Exhibits #1 and #8 of the original application. Only these two exhibits are being submitted with this instant amendment, as well as a slight adjustment in the phase readings and current ratios in Question 8, Section III of Form 302-AM. All of other exhibits originally submitted remain accurate and are not being resubmitted.

AMEND BL-20091124AJE
EL SOL BROADCASTING, LLC
WJTI AM RADIO STATION
1460 kHz - 0.24/1.0 KW DA2
WEST ALLIS, WISCONSIN
April 2010

EXHIBIT #1

Analysis of Tower Impedance Measurements to Verify Method of Moments Model

Tower base impedance measurements were made at the final J-plugs within the Antenna Tuning Units ("ATUs") using an Array Solutions, POWER AIM 120, Vector Impedance Analyzer in a calibrated measurement system. The other towers were all open circuited at the same points where impedance measurements were made (the "reference points") for each of the measurements, in compliance with Section 73.151(c)(1).

The reference point in each ATU is followed by the feed-line that exits the ATU enclosure and is connected to the tower above the base insulator. Circuit calculations were performed to relate the Method of Moments modeled impedances of the tower feed points to the ATU output measurement (reference) points, as shown on the following pages. The $X(L)$ shown for each tower, which was calculated for the assumed stray inductance, was less than 10 μH , in compliance with Section 73.151(c)(1)(vii).

The modeled and measured base impedances at the ATU output jacks with the other towers open circuited at their ATU output jacks agree within ± 2 ohms and ± 4 percent for resistance, as required by Section 73.151(c)(2) of the FCC Rules.

AMEND BL-20091124AJE
EL SOL BROADCASTING, LLC
WJTI AM RADIO STATION
1460 kHz - 0.24/1.0 KW DA2
WEST ALLIS, WISCONSIN
April 2010

EXHIBIT #1A

WJTI 1460 West Allis WI

Moment Calculation Tower	FCC Array Tower	FCC Array Tower	Antenna Monitor Tower										
				L(uH)	X(L)	Z(tower)(modeled)		Z(tower)(measured)		Z(atu)(modeled)		Z(atu)(measured)	
1 (ne)	1		6	3.19	+j 29.2	38.0	+j 23.8	38.0	+j 23.8	38.0	+j 53.0	38.0	+j 53.0
2 (se)	2		5	3.04	+j 27.9	40.6	+j 24.8	40.7	+j 24.8	40.6	+j 52.7	40.7	+j 52.7
3 (center sw)	3	2	2	5.45	+j 50.0	33.1	+j 1.6	33.2	+j 1.6	33.1	+j 51.6	33.2	+j 51.6
4 (sw)	4	1	1	0.25	+j 2.3	48.4	+j 49.9	51.3	+j 49.9	48.4	+j 52.2	51.3	+j 52.2
5 (center nw)		3	3	0.15	+j 1.4	45.4	+j 46.0	46.8	+j 46.0	45.4	+j 47.4	46.8	+j 47.4
6 (nw)		4	4	1.90	+j 17.5	45.7	+j 36.3	45.6	+j 36.3	45.7	+j 53.8	45.6	+j 53.8

X(L) = Assumed Series Inductance per §73.151, c, 1, vii

AMEND BL-20091124AJE
EL SOL BROADCASTING, LLC
WJTI AM RADIO STATION
1460 kHz - 0.24/1.0 KW DA2
WEST ALLIS, WISCONSIN
April 2010

EXHIBIT #8

Sampling System Measurements

Impedance measurements of the antenna monitor sampling system were made using an Array Solutions, POWER AIM 120, Vector Impedance Analyzer in a calibrated measurement system. The measurements were made looking into the antenna monitor ends of the sampling lines without the sampling lines connected to the toroid samples under open-circuited conditions.

The following table shows the measured line length and impedance of each sample line in the system. The sampling line lengths were found to be between 166.70 and 167.14 electrical degrees, within the 1.0 degree variance as specified by Section 73.151(c)(2)(i).

In order to determine the characteristic impedance values of the sampling lines, open-circuit measurements were made with frequencies offset to produce +/- 45 degrees of electrical length from resonance. The characteristic impedance was calculated using the following formula where $R_1 + jX_1$ and $R_2 + jX_2$ are the measured impedances at the +45 and -45 degree offset frequencies, respectively:

$$Z_0 = ((R_1^2 + X_1^2)^{1/2} * (R_2^2 + X_2^2)^{1/2})^{1/2}$$

Toroid Current Transformer calibration was checked by placing all transformers in line with the output of the 1460 kHz transmitter into a dummy load. The transformers were connected to the station antenna monitor with short equal length transmission line jumpers. The relative ratio and phase of all transformers was found to be identical. The current transformers were returned to their respective towers.

The impedance of the sample lines and toroid transformers together was measured and are tabulated below.

WJTI

1460 West Allis

MI

Tower Sample Line	Sample Line	Calculated Electrical Length at 1460 kHz (degrees)	Characteristic Impedance
1 (ne)	Andrew FSJ4-50B	166.86	51.20
2 (se)	Andrew FSJ4-50B	166.70	51.70
3 (center sw)	Andrew FSJ4-50B	166.78	51.70
4 (sw)	Andrew FSJ4-50B	166.86	51.60
5 (center nw)	Andrew FSJ4-50B	167.14	51.10
6 (nw)	Andrew FSJ4-50B	166.74	51.40

Longest Line Minus Shortest Line - 0.44° difference @ 1460 kHz

Impedance +/- 0.3 Ohms

Sample Line and Torid Transformer Measured Impedance @ 1460 kHz

Tower Sample System	Toroid Sample Transformer	Resistance (ohms)	Reactance (ohms)
1 (ne)	Phasetek P600-203 10.va	48.90	1.70
2 (se)	Phasetek P600-203 10.va	49.20	1.20
3 (center sw)	Phasetek P600-203 10.va	49.30	1.50
4 (sw)	Phasetek P600-203 10.va	49.20	1.30
5 (center nw)	Phasetek P600-203 10.va	48.90	2.00
6 (nw)	Phasetek P600-203 10.va	49.00	1.80

AFFIDAVIT AND QUALIFICATIONS OF CONSULTANT


State of Georgia)
St. Simons Island) ss:
County of Glynn)

R. Stuart Graham, being duly sworn, deposes and says that he is an officer of Graham Brock, Inc. Graham Brock has been engaged by El Sol Broadcasting, LLC, to prepare the attached Technical Exhibit.

His qualifications are a matter of record before the Federal Communications Commission. He has been active in Broadcast Engineering since 1979.

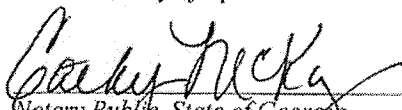
The attached report was either prepared by him or under his direction and all material and exhibits attached hereto are believed to be true and correct.

This the 6th day of April 2010.



R. Stuart Graham
Affiant

*Sworn to and subscribed before me
this the 6th day of April 2010*



Notary Public, State of Georgia
My Commission Expires: March 18, 2011